

REMARKS

Claims 2-3 and 5-6 are currently pending in the application, of which claims 2-3 are independent claims.

In view of the following Remarks, Applicant respectfully requests reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

Rejections Under 35 U.S.C. §103

Claim 2 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,739,545 issued to Guha, *et al.* (“Guha”) in view of no other art. Applicant respectfully traverses this rejection for at least the following reasons.

In order to render the claim obvious, the cited references must teach all the elements of the claimed invention. Claim 2 recites, “wherein said cathode has a first metallic cathode and a second cathode and oxygen that is contained in an interface between said organic layer and said first cathode.” The cited reference does not teach at least these features. For example, the cited reference does not explicitly indicate that any oxygen is “contained in an interface between said organic layer and said first cathode layer.” The cited reference describes an Alq₃ layer. This layer is not even an oxide, although it includes oxygen in its molecular structure. Thus, the Alq₃ layer would not, by itself produce the kinds of effects described in the present application, such as changing an unstable level to a stable level or producing a perfect state of the interface.

Also, Applicant notes that Alq₃ cited by the Examiner is used in the present invention as a material forming an organic light emitting layer. Therefore, Alq₃ is properly considered as a conductive material, not an insulator. Since all *Guha* teaches is Alq₃ as the light emitting layer,

it does not disclose oxygen contained in an interface between an organic layer and a first cathode layer.

Claim 2 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Publication No. 09-232079 of Hosokawa, *et al.* (“*Hosokawa*”) in view of no other art. Applicant respectfully traverses this rejection for at least the following reasons.

In order to render the claim obvious, the cited references must teach all the elements of the claimed invention. Claim 2 recites, “wherein said cathode has a first metallic cathode and a second cathode and oxygen that is contained in an interface between said organic layer and said first cathode.” The cited reference does not teach at least these features. For example, the cited reference does not explicitly indicate that any oxygen is “contained in an interface between said organic layer and said first cathode layer.” Further, *Hosokawa* requires that the oxygen content of the cathode (to say nothing about the interface) be minimized to be less than 1at%. Thus, *Hosokawa* is contrary to the present invention and does not teach that oxygen should be contained in an interface between an organic layer and a first cathode layer.

With regard to claim 3, the claim recites “wherein said cathode has a plurality of layers and an oxygen content in a first metallic cathode contained in said plurality of layers being in contact with said organic layer is larger than that in any cathode formed on a second cathode and afterward being not in contact with said organic layer.” The cited reference does not teach these features.

Claims 5-6 depend from claims 2-3 respectively and thus are patentable for at least the reasons claims 2-3 are patentable. They may also be separately patentable because they recite additional features.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. §103(a) rejection of claims 2-3 and 5-6. Since none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of the claimed invention, Applicant respectfully submits that independent claims 2-3, and all the claims that depend from them are allowable.

CONCLUSION

Applicant believes that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

If the Examiner feels that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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